# ENVIRONMENTAL SERVICES SPB05-894P-FF

#### 1. PARTIES

THIS CONTRACT, is entered into by and between the State of Montana, Department of Administration, State Procurement Bureau, (hereinafter referred to as "the State"), whose address and phone number are Room 165 Mitchell Building, 125 North Roberts, PO Box 200135, Helena MT 59620-0135, (406) 444-2575 and **Oasis Environmental**, (hereinafter referred to as the "Contractor"), whose nine digit Federal ID Number, address and phone number are 92-0155937, 482 Electric Ave Suite 5, Bigfork MT 59911, and (406) 837-0804.

#### THE PARTIES AGREE AS FOLLOWS:

# 2. PURPOSE

The purpose of this term contract is to establish a list of Environmental Service Providers in several service areas. All qualified offerors will be assembled into a multiple contractor term contract for use by state agencies and other public procurement units. The State makes no guarantee of use by any agency-authorized access to this term contract. However, through data conveyed by the Montana Department of Environmental Quality, Montana Department of Natural Resources and Conservation, and Montana Fish, Wildlife and Parks, it is anticipated that this term contract should access approximately 2.5 million dollars or more annually.

# 3. <u>EFFECTIVE DATE, DURATION, AND RENEWAL</u>

- 3.1 Contract Term. This contract shall take effect upon execution of all signatures, and terminate on June 30, 2008, unless terminated earlier in accordance with the terms of this contract. (Mont. Code Ann. § 18-4-313.)
- <u>3.2</u> Contract Renewal. This contract may, upon mutual agreement between the parties and according to the terms of the existing contract, be renewed in one-year intervals, or any interval that is advantageous to the State, for a period not to exceed a total of three additional years. This renewal is dependent upon legislative appropriations.
- 3.3 Addition of Analytical Laboratory Contractor. Proposals will be accepted between April 1 and May 1 of each calendar year from current firms requesting review of their qualifications to perform Analytical Laboratory Services as originally requested under RFP SPB05-894P. The state will evaluate each proposal received in the exact manner in which the original proposals for other categories were evaluated. If proposal passes the requirements as evaluated to perform Analytical Lab Services, the state will update that firms term contract to include the Analytical Lab Services category contingent on said firm being in good standing otherwise.

# 4. NON-EXCLUSIVE CONTRACT

The intent of this contract is to provide state agencies with an expedited means of procuring supplies and/or services. This contract is for the convenience of state agencies and is considered by the State Procurement Bureau to be a "Non-exclusive" use contract. Therefore, agencies may obtain this product/service from sources other than the contract holder(s) as long as they comply with Title 18, MCA, and their delegation agreement. The State Procurement Bureau does not guarantee any usage.

# 5. <u>COOPERATIVE PURCHASING</u>

Under Montana law, public procurement units, as defined in section 18-4-401, MCA, have the option of cooperatively purchasing with the State of Montana. Public procurement units are defined as local or state public procurement units of this or any other state, including an agency of the United States, or a tribal procurement unit. Unless the bidder/offeror objects, in writing, to the State Procurement Bureau prior to the

award of this contract, the prices, terms, and conditions of this contract will be offered to these public procurement units.

## 6. TERM CONTRACT REPORTING

Term contract holder(s) shall furnish annual reports of term contract usage. Each report shall contain complete information on all public procurement units utilizing this term contract. Minimum information required to be included in usage reports: name of the agency or governmental entity who contacted you regarding a potential project; project title; agency contact person; if the project was not successfully negotiated, state the reason; number and title of contracts received; total dollar amounts for contracts received; the names of your company personnel involved in the project; and project status as of usage report date. The report for this term contract will be due on July 20<sup>th</sup> of each year.

Reported volumes and dollar totals may be checked by the State Procurement Bureau against State records for verification. Failure to provide timely or accurate reports is justification for cancellation of the contract and/or justification for removal from consideration for award of contracts by the State.

#### 7. COST/PRICE ADJUSTMENTS

- <u>7.1 Cost Increase by Mutual Agreement.</u> After the initial term of the contract, each renewal term may be subject to a cost increase by mutual agreement. Contractor must provide written, verifiable justification for any cost adjustments they request during each renewal period. Contractor shall provide its cost adjustments in both written and electronic format.
- **7.2 Differing Site Conditions.** If, during the term of this contract, circumstances or conditions are materially different than set out in the specifications, the Contractor may be entitled to an equitable adjustment in the contract price. The Contractor shall immediately cease work and notify, in writing, the State of any such conditions necessitating an adjustment as soon as they are suspected and prior to the changed conditions affecting the performance of this contract. Any adjustment shall be agreed upon in writing by both parties to the contract.

# 8. <u>SERVICES AND/OR SUPPLIES</u>

**8.1 Service Categories.** Contractor agrees to provide to the State the following services:

Revegetation Services. Revegetation Specialists are utilized by the State and other governmental entities to enhance and complete environmental project tasks. The services offered by Revegetation Specialists are planning, designing, implementation along with providing of supplies, materials and equipment necessary to carryout the tasks. If a firm does not have the staff or equipment to implant a project, they must then be able to demonstrate a plan for delivery of product and implementation of a project through subcontracting or professional cooperative agreements.

**8.2** Reuse of Documents. When the projects dictate a design or engineered approach, the State agrees that it will not apply the Contractor's designs to any other projects.

# 9. **ENGINEERING ACCESS**

All of the firms selected may need to have access to engineering services depending on the nature of the project. The contractor(s) will be expected to use their own best judgment as to whether engineering services are needed for a given project. However, traditional engineering methodologies are not the emphasis of this RFP. It is a violation of State Statute to practice engineering or land surveying without a license.

#### 10. PROJECT SELECTION

- <u>10.1 Project Identification.</u> The State will be responsible for identifying projects, contacting landowners and securing necessary permission/cooperation agreements, selecting a contractor, writing grant applications and approving project payments.
- **10.2** Hazardous Materials. The State will not initiate projects where it is known that hazardous materials are present. If there is an indication of a potential of hazardous materials, then the State will do testing prior to contacting the contractor. However, there is always the possibility of unforeseen problems resulting in the stoppage of a project.
- <u>10.3 Meetings.</u> The selected contractor may be required to meet with State personnel at the project site to conduct a site evaluation, discuss project issues and begin the negotiation process on project feasibility, conceptual design and costs for each project.
- <u>10.4 Approach Expectations.</u> In the case of restoration activities, the agency will identify the preferred techniques. The determination made by the State may define which contractor(s) are contacted for project initiation. The State is always open to new and innovative approaches that accomplish project goals.

# 11. <u>SELECTING A CONTRACTOR</u>

The State may select a term contract holder from the Environmental Services contract home page as provided under the state's website address

http://www.discoveringmontana.com/doa/gsd/procurement/TermContracts/environservices/Default.asp, taking into consideration such things as the contractor's area of expertise, requirements and location of the project, the contractor's availability and access to resources necessary to efficiently and effectively complete the project, demonstrated excellent past performance on State and public projects, identified subcontractors and total project cost.

<u>General.</u> Ordering agencies shall use the procedures in this section when ordering services priced at hourly rates as established by each Term Contract (TC). The applicable service categories are identified in each TC along with the contractor's price lists.

Request for Quotation (RFQ) procedures. The ordering agency must provide an RFQ, which includes the statement of work and limited, but specific evaluation criteria (e.g., experience and past performance), to TC contractors that offer services that will meet the agency's needs. The RFQ may be posted to the agency's state website to expedite responses.

<u>Statement of Work (SOWs).</u> All SOW's shall include at a minimum a detailed description of the work to be performed, location of work, period of performance, deliverable schedule, applicable performance standards and any special requirements (e.g., security clearances, travel, special knowledge).

- (1) Ordering agency may select a contractor from the appropriate service category and directly negotiate a mutually acceptable project based on a sudden and unexpected happening or unforeseen occurrence or condition, which requires immediate action. (Exigency).
- (2) Ordering agency may place orders at or below the \$5,000 threshold with any TC contractor that can meet the agency's needs. The ordering agency should attempt to distribute orders among all service category contractors.
- (3) For orders estimated to exceed \$5,000 but less than \$25,000.
  - (i) The ordering agency shall develop a statement of work.
  - (ii) The ordering agency shall provide the RFQ (including the statement of work and evaluation criteria) to at least three TC contractors that offer services that will meet the agency's needs.

- (iii) The ordering agency shall request that contractors submit firm-fixed prices to perform the services identified in the statement of work.
- (4) For orders estimated to exceed \$25,000. In addition to meeting the requirements of (3) above, the ordering agency shall:
  - (i) Provide the RFQ (including the statement of work and the evaluation criteria) to a minimum of six service category TC contractors (if category has less than 6, all contractors will be offered an RFQ) with a 50% replacement factor for each subsequent request for quote in the same service category.

<u>Evaluation</u>. The ordering agency shall evaluate all responses received using the evaluation criteria provided in the RFQ to each TC contractor. The ordering agency is responsible for considering the level of effort and the mix of labor proposed to perform a specific task being ordered, and for determining that the total price is reasonable. The agency will place the order with the contractor that represents the best value. After award, ordering agencies will provide timely notification to unsuccessful TC contractors. If an unsuccessful TC contractor requests information on a task order award that was based on factors other than price alone, a brief explanation of the basis for the award decision shall be provided.

Minimum documentation. The ordering agency shall document:

- (1) The TC contractors considered, noting the contractor from which the service was purchased.
- (2) A description of the service purchased.
- (3) The amount paid.
- (4) The evaluation methodology used in selecting the contractor to receive the order.
- (5) The rationale for making the selection.
- (6) Determination of price fair and reasonableness.

Agency project task orders will be utilized to finalize the project. Only written addenda will be used for adjustments of the task orders and must be signed by both parties. All task orders must contain signatures from both parties and appropriate agency legal review as directed in their procurement policy.

The State will monitor contractor selection by using the information provided in the annual TC usage reports.

Contractor's who fail to respond to three RFQ opportunities within a one-year period between July 1<sup>st</sup> and June 30<sup>th</sup> may be removed from the qualified list of contractors.

# 12. CONTRACTOR RESPONSIBILITIES

**12.1 Supervision and Implementation.** The selected contractor for an individual project will be responsible for the supervision and implementation of the approach and will be responsible for oversight of work performed by all subcontractors. In most cases the contractor will provide and be responsible for all the necessary equipment, materials, supplies and personnel necessary for proper execution of the work. However, the State reserves the right to hire subcontractors (equipment and/or labor) if it will provide a cost savings to the State. The selected contractor will also be responsible for clean up of the sites if necessary and must have the sites inspected by the State immediately prior to completion.

<u>12.2 On-Site Requirements.</u> When a contractor is contacted by the State to discuss a project, the State and the contractor may visit the job site if deemed necessary by the Project Manager, to become familiar with conditions relating to the project and the labor requirements. The State will provide a detailed scope of work for the project and request the contractor supply the State with a response to project approach, cost, timeframe and any other information deemed necessary by the State to make a selection or complete a contract negotiation.

In the cases of Restoration or On-The-Ground Activities, the contractor shall adequately protect the work, adjacent property, and the public in all phases of the work. They shall be responsible for all damages or injury due to their action or neglect.

The contractor shall maintain access to all phases of the contract pending inspection by the State, the landowner, or their representative. All interim or final products funded by the contract will become the property of the State or Cooperative Purchaser upon payment for said products.

All work rejected as unsatisfactory shall be corrected prior to final inspection and acceptance. The contractor shall respond within seven calendar days after notice of observed defects has been given and shall proceed to immediately remedy these defects. Should the contractor fail to respond to the notice or not remedy the defects, the State may have the work corrected at the expense of the contractor.

#### **12.3** Clean Up (when project tasks require). The contractor shall:

- Keep the premises free from debris and accumulation of waste;
- Clean up any oil or fuel spills;
- Keep machinery clean and free of weeds;
- Remove all construction equipment, tools and excess materials; and
- Perform finishing site preparation to limit the spread of noxious weeds before final payment by the State.
- <u>12.4 Applicable Laws.</u> The contractor shall keep informed of, and shall comply with all applicable laws, ordinances, rules, regulations and orders of the City, County, State, Federal or public bodies having jurisdiction affecting any work to be done to provide the services required. The contractor shall provide all necessary safeguards for safety and protection, as set forth by the United States Department of Labor, Occupational Safety and Health Administration.
- <u>12.5</u> <u>Cooperation.</u> The contractor shall work closely with the States analytical consultants, (i.e. environmental laboratories and taxonomists) to develop the desired products.
- <u>12.6</u> Work Acceptance. The contractor is responsible for project oversight as needed. The State may also periodically provide personnel for administrative oversight from the initiation of the contract through project completion. All work will be inspected by the State or designated liaison prior to approval of any contract payments. All work rejected as unsatisfactory shall be corrected prior to final inspection and acceptance. Contractor shall respond within seven calendar days after notice of defects has been given by the State and proceed to immediately remedy all defects.
- <u>12.7 Records.</u> The contractor will supply the State with documentation, when requested, of methods used throughout project implementation. Contractor will maintain records for themselves and all subcontractors of supplies, materials, equipment and labor hours expended.
- 12.8 Communication. Remoteness of project sites may necessitate that the contractor have some form of field communication such as a cellular phone. This communication is necessary to enable the State to respond to public concerns related to the project, accidents, inspections, or other project issues that require immediate feedback. In addition, the State or Cooperative Purchaser may require scheduled communication at agreed upon intervals. The communication schedule will be dependent upon the project circumstances and requirements of the contracting agency. In the case when a communication schedule is included in the Scope of Work, the schedule will commence when the contractor initiates the project.
- 12.9 Change of Staffing. Since qualifications of personnel were key in determining which offerors were selected to be on this TC, a written notification of any changes in key personnel must be made to the state agency, prior to entering into negotiations to perform any specific work scope. Contractor shall replace such employee(s) at its own expense with an employee of substantially equal abilities and qualifications without additional cost to the agency. If these staffing changes cause the contractor to no longer meet the qualifications stated herein, that firm will be removed from the service area of this TC. Failure to notify the state agency of staffing changes could result in the contractor being removed from the TC listing and possible suspension from bidding on other state projects.

<u>12.10 Collaboration.</u> The State encourages collaboration between contractors to increase the scope of services offered. In cases where the chosen contractor is not able to provide all services needed for the project, the State will expect the chosen contractor to contact other contractors on this list to negotiate subcontracts for these services before going elsewhere. Exceptions to this strategy will be evaluated on a case-by-case basis.

<u>12.11 Subcontractors, Project Budget and Invoicing.</u> All subcontractors to be used in any project must be approved by the authorized entity initiating the project. Project budgets will be negotiated for each individual project contract. However, all rates, terms and conditions set forth in this term contract will be applied to individual contracts. Subcontractor is defined as anyone other than the prime contractor having substantial direct involvement in a specific project.

The State reserves the right to choose the invoicing method from the following:

- Prime contractor's billing will include the subcontractors charges and payment will be made to the prime, or
- Prime and subcontractors will bill the State separately and the State will pay each directly.

#### 13. CONSIDERATION/PAYMENT

- <u>13.1</u> Payment Schedule. In consideration for the services to be provided, the State shall pay according to the negotiated agreement for each project. Hourly rates and miscellaneous charges as provided in Attachment B shall apply.
- <u>13.2 Withholding of Payment.</u> The State may withhold payments to the Contractor if the Contractor has not performed in accordance with this contract. Such withholding cannot be greater than the additional costs to the State caused by the lack of performance.

#### 14. CONTRACTOR REGISTRATION

The Contractor will be registered with the Department of Labor and Industry under sections 39-9-201 and 39-9-204, MCA, *prior* to contract execution. The State cannot execute a contract for construction to a Contractor who is not registered. (Mont. Code Ann. § 39-9-401.)

Contractor Registration Number:	<u>51779</u>
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#### 15. CONTRACTOR WITHHOLDING

Section 15-50-206, MCA, requires the state agency or department for whom a public works construction contract over \$5,000 is being performed, to withhold 1 percent of all payments and to transmit such monies to the Department of Revenue.

## 16. MONTANA PREVAILING WAGE REQUIREMENTS

Unless superseded by federal law, Montana law requires that contractors and subcontractors give preference to the employment of Montana residents for any public works contract in excess of \$25,000 for construction or nonconstruction services in accordance with sections 18-2-401 through 18-2-432, MCA, and all administrative rules adopted pursuant thereto. Unless superseded by federal law, at least 50% of the workers of each contractor engaged in construction services must be performed by bona fide Montana residents. The Commissioner of the Montana Department of Labor and Industry has established the resident requirements in accordance with sections 18-2-403 and 18-2-409, MCA. Any and all questions concerning prevailing wage and Montana resident issues should be directed to the Montana Department of Labor and Industry.

In addition, unless superseded by federal law, all employees working on a public works contract shall be paid prevailing wage rates in accordance with sections 18-2-401 through 18-2-432, MCA, and all administrative rules adopted pursuant thereto. Montana law requires that all public works contracts, as defined in section 18-2-401, MCA, in which the total cost of the contract is in excess of \$25,000, contain a provision stating for each

job classification the standard prevailing wage rate, including fringe benefits, travel, per diem, and zone pay that the contractors, subcontractors, and employers shall pay during the public works contract.

Furthermore, section 18-2-406, MCA, requires that all contractors, subcontractors, and employers who are performing work or providing services under a public works contract post in a prominent and accessible site on the project staging area or work area, no later than the first day of work and continuing for the entire duration of the contract, a legible statement of all wages and fringe benefits to be paid to the employees in compliance with section 18-2-423, MCA. Section 18-2-423, MCA, requires that employees receiving an hourly wage must be paid on a weekly basis.

Each contractor, subcontractor, and employer must maintain payroll records in a manner readily capable of being certified for submission under section 18-2-423, MCA, for not less than three years after the contractor's, subcontractor's, or employer's completion of work on the public works contract.

The nature of the work performed or services provided under this contract meets the statutory definition of a "public works contract" under section 18-2-401(11)(a), MCA, and falls under the category of Heavy Construction and Nonconstruction services. The booklets containing Montana's 2003 Rates for Heavy Construction and Nonconstruction Services are attached.

The most current Montana Prevailing Wage Booklet will automatically be incorporated at time of renewal. It is the contractor's responsibility to ensure they are using the most current prevailing wages during performance of its covered work.

## 17. ACCESS AND RETENTION OF RECORDS

<u>17.1 Access to Records.</u> The Contractor agrees to provide the State, Legislative Auditor or their authorized agents access to any records necessary to determine contract compliance. (Mont. Code Ann. § 18-1-118.)

<u>17.2</u> <u>Retention Period.</u> The Contractor agrees to create and retain records supporting the environmental services for a period of three years after either the completion date of this contract or the conclusion of any claim, litigation or exception relating to this contract taken by the State of Montana or a third party.

## 18. <u>ASSIGNMENT, TRANSFER AND SUBCONTRACTING</u>

The Contractor shall not assign, transfer or subcontract any portion of this contract without the express written consent of the State. (Mont. Code Ann. § 18-4-141.) The Contractor shall be responsible to the State for the acts and omissions of all subcontractors or agents and of persons directly or indirectly employed by such subcontractors, and for the acts and omissions of persons employed directly by the Contractor. No contractual relationships exist between any subcontractor and the State.

## 19. HOLD HARMLESS/INDEMNIFICATION

The Contractor agrees to protect, defend, and save the State, its elected and appointed officials, agents, and employees, while acting within the scope of their duties as such, harmless from and against all claims, demands, causes of action of any kind or character, including the cost of defense thereof, arising in favor of the Contractor's employees or third parties on account of bodily or personal injuries, death, or damage to property arising out of services performed or omissions of services or in any way resulting from the acts or omissions of the Contractor and/or its agents, employees, representatives, assigns, subcontractors, except the sole negligence of the State, under this agreement.

#### 20. REQUIRED INSURANCE

- **20.1 General Requirements.** The Contractor shall maintain for the duration of the contract, at its cost and expense, insurance against claims for injuries to persons or damages to property, including contractual liability, which may arise from or in connection with the performance of the work by the Contractor, agents, employees, representatives, assigns, or subcontractors. This insurance shall cover such claims as may be caused by any negligent act or omission.
- **20.2 Primary Insurance.** The Contractor's insurance coverage shall be primary insurance as respect to the State, its officers, officials, employees, and volunteers and shall apply separately to each project or location. Any insurance or self-insurance maintained by the State, its officers, officials, employees or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
- **20.3** Specific Requirements for Commercial General Liability. The Contractor shall purchase and maintain occurrence coverage with combined single limits for bodily injury, personal injury, and property damage of \$1,000,000 per occurrence and \$2,000,000 aggregate per year to cover such claims as may be caused by any act, omission, or negligence of the Contractor or its officers, agents, representatives, assigns or subcontractors.
- **20.4** Additional Insured Status. The State, its officers, officials, employees, and volunteers are to be covered and listed as additional insureds; for liability arising out of activities performed by or on behalf of the Contractor, including the insured's general supervision of the Contractor; products and completed operations; premises owned, leased, occupied, or used.
- **20.5** Specific Requirements for Automobile Liability. The Contractor shall purchase and maintain coverage with split limits of \$500,000 per person (personal injury), \$1,000,000 per accident occurrence (personal injury), and \$100,000 per accident occurrence (property damage), OR combined single limits of \$1,000,000 per occurrence to cover such claims as may be caused by any act, omission, or negligence of the contractor or its officers, agents, representatives, assigns or subcontractors.
- **20.6** Additional Insured Status. The State, its officers, officials, employees, and volunteers are to be covered and listed as additional insureds for automobiles leased, hired, or borrowed by the Contractor.
- **20.7** Specific Requirements for Professional Liability. The Contractor shall purchase and maintain occurrence coverage with combined single limits for each wrongful act of \$1,000,000 per occurrence and \$2,000,000 aggregate per year to cover such claims as may be caused by any act, omission, negligence of the Contractor or its officers, agents, representatives, assigns or subcontractors. Note: if "occurrence" coverage is unavailable or cost prohibitive, the Contractor may provide "claims made" coverage provided the following conditions are met: (1) the commencement date of the contract must not fall outside the effective date of insurance coverage and it will be the retroactive date for insurance coverage in future years; and (2) the claims made policy must have a three year tail for claims that are made (filed) after the cancellation or expiration date of the policy.
- **20.8 Deductibles and Self-Insured Retentions.** Any deductible or self-insured retention must be declared to and approved by the state agency. At the request of the agency either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the State, its officers, officials, employees, or volunteers; or (2) at the expense of the Contractor, the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claims administration, and defense expenses.
- **20.9** Certificate of Insurance/Endorsements. A certificate of insurance from an insurer with a Best's rating of no less than A- indicating compliance with the required coverages, has been received by the State Procurement Bureau, PO Box 200135, Helena MT 59620-0135. The Contractor must notify the State immediately, of any material change in insurance coverage, such as changes in limits, coverages, change in status of policy, etc. The State reserves the right to require complete copies of insurance policies at all times.

#### 21. COMPLIANCE WITH THE WORKERS' COMPENSATION ACT

Contractors are required to comply with the provisions of the Montana Workers' Compensation Act while performing work for the State of Montana in accordance with sections 39-71-120, 39-71-401, and 39-71-405, MCA. Proof of compliance must be in the form of workers' compensation insurance, an independent contractor's exemption, or documentation of corporate officer status. Neither the contractor nor its employees are employees of the State. This insurance/exemption must be valid for the entire term of the contract. A renewal document must be sent to the State Procurement Bureau, PO Box 200135, Helena MT 59620-0135, upon expiration.

#### 22. <u>COMPLIANCE WITH LAWS</u>

The Contractor must, in performance of work under this contract, fully comply with all applicable federal, state, or local laws, rules and regulations, including the Montana Human Rights Act, the Civil Rights Act of 1964, the Age Discrimination Act of 1975, the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. Any subletting or subcontracting by the Contractor subjects subcontractors to the same provision. In accordance with section 49-3-207, MCA, the Contractor agrees that the hiring of persons to perform the contract will be made on the basis of merit and qualifications and there will be no discrimination based upon race, color, religion, creed, political ideas, sex, age, marital status, physical or mental disability, or national origin by the persons performing the contract.

## 23. INTELLECTUAL PROPERTY

All patent and other legal rights in or to inventions created in whole or in part under this contract must be available to the State for royalty-free and nonexclusive licensing. Both parties shall have a royalty-free, nonexclusive, and irrevocable right to reproduce, publish or otherwise use and authorize others to use, copyrightable property created under this contract.

#### 24. PATENT AND COPYRIGHT PROTECTION

- **24.1** Third Party Claim. In the event of any claim by any third party against the State that the products furnished under this contract infringe upon or violate any patent or copyright, the State shall promptly notify Contractor. Contractor shall defend such claim, in the State's name or its own name, as appropriate, but at Contractor's expense. Contractor will indemnify the State against all costs, damages and attorney's fees that accrue as a result of such claim. If the State reasonably concludes that its interests are not being properly protected, or if principles of governmental or public law are involved, it may enter any action.
- **24.2 Product Subject of Claim.** If any product furnished is likely to or does become the subject of a claim of infringement of a patent or copyright, then Contractor may, at its option, procure for the State the right to continue using the alleged infringing product, or modify the product so that it becomes non-infringing. If none of the above options can be accomplished, or if the use of such product by the State shall be prevented by injunction, the State will determine if the Contract has been breached.

# 25. CONTRACT TERMINATION

- **25.1 Termination for Cause.** The State may, by written notice to the Contractor, terminate this contract in whole or in part at any time the Contractor fails to perform this contract.
- **25.2** Reduction of Funding. The State, at its sole discretion, may terminate or reduce the scope of this contract if available funding is reduced for any reason. (See Mont. Code Ann. § 18-4-313(3).)

## 26. STATE PERSONNEL

<u>26.1 State Contract Manager.</u> The State Contract Manager identified below is the State's single point of contact and will perform all contract management pursuant to section 2-17-512, MCA, on behalf of the

State. Written notices, requests, complaints or any other issues regarding the contract should be directed to the State Contract Manager.

The State Contract Manager for this contract is:

Robert Oliver, Contracts Officer Room 165 Mitchell Building 125 North Roberts PO Box 200135 Helena MT 59620-0135 Telephone #: (406) 444-0110

Fax #: (406) 444-2529 E-mail: roliver@mt.gov

**<u>26.2 State Project Manager.</u>** Each using State agency or Cooperative Purchaser will identify a Project Manager in the project task order. The Project Manager will manage the day-to-day project activities on behalf of the State/Cooperative Purchaser.

# 27. CONTRACTOR PERSONNEL

**27.1 Change Of Staffing.** Since qualifications of personnel was key in determining which offerors were selected to be on this term contract list, a written notification to the <u>State Procurement Bureau</u> of any changes of key personnel must be made within two weeks of the change. These change notifications will be completed upon the departure or hiring of key personnel who are professional employees critical to awarded service areas. If these staffing changes cause the firm to no longer meet the qualifications stated herein, that firm will be removed from the service area of this term contract. Failure to notify the State Procurement Bureau of staffing changes could result in the contractor being removed from the term contract listing and possible suspension from bidding on other State projects.

**27.2** Contractor Contract Manager. The Contractor Contract Manager identified below will be the single point of contact to the State Contract Manager and will assume responsibility for the coordination of all contract issues under this contract. The Contractor Contract Manager will meet with the State Contract Manager and/or others necessary to resolve any conflicts, disagreements, or other contract issues.

The Contractor Contract Manager for this contract is:

Jeff Leety PO Box 1384 482 Electric Ave Suite 5 Bigfork MT 59911 Telephone #: (406) 837-0804 Fax #: (406) 837-0842

E-mail: jeff@oasisenviro.com

**27.3** Contractor Project Manager. The Contractor Project Manager identified below will manage the day-to-day project activities on behalf of the Contractor:

The Contractor Project Managers for this contract are:

Jeff Leety
PO Box 1384
482 Electric Ave Suite 5
Bigfork MT 59911
Telephone # (406) 837.00

Telephone #: (406) 837-0804 Fax #: (406) 837-0842

E-mail: jeff@oasisenviro.com

#### 28. MEETINGS

The Contractor is required to meet with the State's personnel, or designated representatives, to resolve technical or contractual problems that may occur during the term of the contract or to discuss the progress made by Contractor and the State in the performance of their respective obligations, at no additional cost to the State. Meetings will occur as problems arise and will be coordinated by the State. The Contractor will be given a minimum of three full working days notice of meeting date, time, and location. Face-to-face meetings are desired. However, at the Contractor's option and expense, a conference call meeting may be substituted. Consistent failure to participate in problem resolution meetings two consecutive missed or rescheduled meetings, or to make a good faith effort to resolve problems, may result in termination of the contract.

# 29. CONTRACTOR PERFORMANCE ASSESSMENTS

The State may do assessments of the Contractor's performance. This contract may be terminated for one or more poor performance assessments. Contractors will have the opportunity to respond to poor performance assessments. The State will make any final decision to terminate this contract based on the assessment and any related information, the Contractor's response and the severity of any negative performance assessment. The Contractor will be notified with a justification of contract termination. Performance assessments may be considered in future solicitations.

#### 30. TRANSITION ASSISTANCE

If this contract is not renewed at the end of this term, or is terminated prior to the completion of a project, or if the work on a project is terminated, for any reason, the Contractor must provide for a reasonable period of time after the expiration or termination of this project or contract, all reasonable transition assistance requested by the State, to allow for the expired or terminated portion of the services to continue without interruption or adverse effect, and to facilitate the orderly transfer of such services to the State or its designees. Such transition assistance will be deemed by the parties to be governed by the terms and conditions of this contract, except for those terms or conditions that do not reasonably apply to such transition assistance. The State shall pay the Contractor for any resources utilized in performing such transition assistance at the most current rates provided by the contract. If there are no established contract rates, then the rate shall be mutually agreed upon. If the State terminates a project or this contract for cause, then the State will be entitled to offset the cost of paying the Contractor for the additional resources the Contractor utilized in providing transition assistance with any damages the State may have otherwise accrued as a result of said termination.

#### 31. CHOICE OF LAW AND VENUE

This contract is governed by the laws of Montana. The parties agree that any litigation concerning this bid, proposal or subsequent contract must be brought in the First Judicial District in and for the County of Lewis and Clark, State of Montana and each party shall pay its own costs and attorney fees. (See Mont. Code Ann. § 18-1-401.)

## 32. SCOPE, AMENDMENT AND INTERPRETATION

**32.1 Contract.** This contract consists of 11 numbered pages, any Attachments as required, RFP # SPB05-894P, as amended and the Contractor's RFP response as amended. In the case of dispute or ambiguity about the minimum levels of performance by the Contractor the order of precedence of document interpretation is in the same order.

**32.2** Entire Agreement. These documents contain the entire agreement of the parties. Any enlargement, alteration or modification requires a written amendment signed by both parties.

# 33. EXECUTION

The parties through their authorized agents have executed this contract on the dates set out below.

DEPARTMENT OF ADMINISTRATION
STATE PROCUREMENT BUREAU
PO BOX 200135
HELENA MT 59620-0135

OASIS ENVIRONMENTAL 482 ELECTRIC AVE SUITE 5 BIGFORK MT 59911 FEDERAL ID # 92-0155937

BY:	BY:
Penny Moon, Contracts Officer	(Name/Title)
BY:	BY:
(Signature)	(Signature)
DATE:	DATE:

# ATTACHMENT A CONTRACTOR'S RESPONSE

# SECTION 4: OFFEROR QUALIFICATIONS SERVICE CATEGORY REVEGETATION SERVICES

# 4.0 STATE'S RIGHT TO INVESTIGATE AND REJECT ADC Services, Inc. understands and will comply.

#### 4.1 OFFEROR INFORMATIONAL RQUIREMENTS

#### 4.1.1 References.

**REFERENCE #1** 

Client/Project Name: Montana Department of Transportation

Project Location: Jeffers, Montana, Madison County

Contact Person: Larry Urban, Wetland Mitigation Specialist, MDOT

406.444.6224

Rick Webel, Jack Creek Ranch

516.674.4200

Project Dates: Design, Permitting and Contractual Agreements: 2001-2003

Construction and Revegetation: 2003-Present

Project Cost: \$815,000

Project Description:

An extensive wetland mitigation supplied wetland credit to MDOT for road building activities in Madison County. ADC provided a turnkey approach to the project by designing, contracting, custom growing, and by implementing the construction and planting.

The design for the wetland portion of the restoration project focused on returning wetland hydrology to approximately 80 acres of drained wetlands in the vicinity of a drainage ditch system. The elimination of the ditch system has enabled subsurface and surface hydrology to once again return and influence the vegetative community of the field. In addition to restoring the site's historic hydrology, structural diversity of the wetlands was also enhanced by creating approximately 4.1 acres of shrub/scrub type wetlands, and approximately 1.1 acres of shallow excavations that are seasonally inundated during high water table conditions. The shallow excavations will also retain and store rainwater.

The project also included construction of 9,300 feet of spring creek channel within the existing over-widened McKee Spring Creek. Due to its proximity to the Madison River with its reliable source of high quality spring water, McKee Spring Creek was historically an important spawning tributary for the Madison River. Alterations in the recent past to the structure of the creek left it severely degraded. The work on McKee Spring Creek revolved around restoring and enhancing fluvial fish habitat, restoring the channels hydraulic efficiency, and restoring adjacent scrub/shrub and emergent wetlands. The project, backed by a conservation-minded land ownership ethic, returned McKee Spring Creek to a dimension more consistent with what would be expected in undisturbed environments based on flow regime, valley slope, and bed and bank materials.

Analysis of the data led to the selection of a target channel type that is very narrow in relation to its depth, characterized by vertical and often undercut banks. Channel banks are bound together by a good stand of herbaceous wetland vegetation, combined with deep-rooted woody shrubs. Based on the channel bed and

bank materials along the McKee Spring Creek corridor, the target channel cross section was comparable to an E5 channel under the Rosgen Classification System. The basic channel section was then refined through hydraulic analysis using HEC-RAS water surface profile software.

For the revegetation goals of the project, ADC custom grew (in our nursery facilities), delivered and installed approximately 58,600 sedge and rush plugs, and planted approximately 4,000 woody and herbaceous plants across the project; in addition, wetland and upland seed was broadcast across the disturbed areas.

The revegetation strategy included on-site transplants and seed collections, which were brought back to the growing facility and propagated. Through 2006, ADC will continue the established monitoring program and plant more woody and herbaceous transplants as necessary to ensure the projects' revegetation goals are achieved.

**REFERENCE #2** 

Client/Project Name: Renaissance Ranch

Project Location: Pine Creek, Paradise Valley, Montana, Park County

Contact Person: Dan Todd, Renaissance Ranch

732.450.8974

Project Dates: Spring, Summer 2000

Project Cost: \$885,000

Project Description:

Services provided at the Renaissance Ranch included streambank stabilization, in-stream habitat improvements, complete channel creation, creation of a six-acre lake and project area revegetation. Pool Creek, a perennial channel, had been historically impacted through cattle and domestic buffalo grazing and watering. In addition, the creek had been dredged in an attempt to secure a winter water supply. The lower end of the creek was also dammed to provide summer livestock water.

ADC was hired by a new landowner to restore a 2,500-foot reach of the Yellowstone River tributary. The project design included restoration of channel plan form and profile, restoration of riffle / pool sequences, and creation of in-channel habitat features. The project also included creation of 1,400 feet of new channel to bypass the existing on-channel pond. In order to enhance the completed fishery and spawning channel the Pool Creek flow is now augmented with a non-consumptive water appropriation (6.3 cfs) from the Yellowstone River. All necessary permits (310's, 404, 3A, Water Rights, County Floodplain Permit) were obtained through in-house design documentation.

An ADC Revegetation Team completed all the planting, seeding and cuttings utilize either on-site transplants, or nursery stock from the ADC Nursery. A wetland sod borrow site was evaluated near the stream corridor. Desirable wetland species were identified and approximately 1,500 ft2 of wetland sod mats were excavated, tranand used in the construction of the newly aligned channel banks. Beyond the immediate bank areas where sod was used, the over-bank areas were planted with nearly 10,000 containerized wetland plugs and seeded with an appropriate native seed mix. A total of approximately 1.75 acres of riparian wetlands were restored along the stream corridor.

#### **REFERENCE #3**

Client/Project Name: East Catron Creek Restoration

Project Location: Bozeman, Montana, Gallatin County

Contact Person: Gene Graff

406.587.7650

Project Dates: May 1998-Present

Project Cost: \$112,000

Project Description:

The Gallatin Center, Inc. retained ADC Services, Inc. to relocate and enhance a straightened and channelized reach of East Catron Creek in Bozeman, Montana. ADC worked closely with MT Fish Wildlife & Parks (FWP) and the developer to create a working configuration for creek relocation, which fit within a meander corridor specified by the developer and increased stream length and fish habitats required by the permitting agencies. The restoration design included plan form and profile design as well as hydraulic analysis and HEC-RAS model development. Design criteria included flood plain capacity to convey a 100-year flood without impacting surrounding infrastructure.

ADC provided oversight on the project from initial planning through construction and revegetation. The revegetation plan included seed collection, propagation, transplanting, maintenance, delivery and the planting of obligate wetland plants through the transitional zone. These plantings included native rushes and sedges (over 2,700 plugs), willow, dogwood, cottonwood, aspen (over 275 saplings) and upland forbs and wildflowers.

In order to out-compete invasive species such as Reed Canary Grass, the streambanks were planted at ½ foot and smaller intervals for quicker vegetative establishment.

**REFERENCE #4** 

Client/Project Name: Montana Department of Transportation &

Montana Wetlands Legacy

Project Location: Cloud Ranch, Big Timber, Montana, Sweet Grass County

Contact Person: Larry Urban, Wetland Mitigation Specialist, MDOT

406.444.6224

Tom Hintz, Fish Wildlife & Parks

406.994.7889

John Heminway, Cloud Ranch

917.842.9799

Project Dates: Spring, Summer 2001

Project Cost: \$120,000

Project Description:

The Cloud Ranch is located approximately 12 miles north of Big Timber, Montana, on the east slope of the Crazy Mountains. Big Timber Creek provides excellent habitat for a well-documented population of native Yellowstone Cutthroat trout. The ranch contains a one-mile reach of Big Timber Creek, which was severely disturbed during the 1990's. After a rare fall flood, the previous owner used a bulldozer to modify the channel in an apparent attempt to mitigate future flood impacts. The modifications resulted in a straightened and widened channel. Channel bed materials were used to create dikes along much of the left bank margin. The alterations to the natural channel and floodplain caused accelerated degradation and impairment to the surrounding riparian wetland and floodplain habitat.

ADC was retained by the Cloud Ranch to develop a stream and floodplain restoration plan for the impacted reach of Big Timber Creek. The channelized segment of the creek was restored to a more sinuous pattern consistent with an upstream reference reach. Created over-bank areas and associated point bars were densely vegetated with 7,400-willow and cottonwood plantings custom grown by ADC's Native Nursery. During

the channel realignment the artificial dikes were removed, allowing the floodwaters to spread out, reconnecting the channel to its floodplain. Additionally, several artificial ponds were filled and restored to emergent wetlands. Adjacent upland areas were graded to convert the areas to wetlands. ADC's Native Nursery custom grew 12,500 native wetland sedge, rush, and bulrush plugs for this portion of the project and our revegetation team successfully implemented the revegetation design to meet project goals. As a result of these restoration efforts, 5.5 acres of riparian and emergent wetlands were restored on the bottomland of Big Timber Creek.

Wetland banking credits were accepted by and sold to Montana Department of Transportation (MDT). These funds paid for a large portion of this project, restoring and increasing the natural resource values of the land.

**REFERENCE #5** 

Client/Project Name: Fleshman Creek Restoration

Project Location: Fleshman Creek, Livingston, Montana, Park County

Contact Person: Gary Weiner, National Park Service

406.587.1667

Steve Golnar, City of Livingston

406.222.2005

Project Dates: Spring 2004

Project Cost: \$11,000

Project Description:

The City of Livingston retained ADC Services Inc. to design and implement the revegetation portion of the Fleshman Creek Restoration project. Fleshman Creek is a small spring-fed tributary of the Yellowstone River. The creek flows thorough the City of Livingston through the city park lagoon and then through an historical channel of the Yellowstone River. Since the small creek flowed through an abandoned Yellowstone River Channel the creek flows have always been insufficient for the relatively large channel size. This, compounded by several large beaver ponds, resulted in a very wide shallow channel. Through a cooperative effort of the Joe Brooks Chapter of Trout Unlimited, the National Park Services, and the City of Livingston a new narrowed channel was designed and constructed over a 2,200 ft reach. The construction resulted in over an acre of newly constructed flood plain. ADC's Native Nursery custom grew the vegetation necessary to restore the plant community for 2,200 feet of streambank and 1.2 acres of adjacent floodway. Approximately 1,000 willow cuttings were obtained and 3,000 wetland plugs and 180 riparian shrubs were grown, delivered, and installed by the ADC revegetation team with the help of over 300 Livingston middle school student volunteers. In addition, a riparian seed mix was broadcast and a 1/3-acre area of disturbed uplands was covered with topsoil and seeded with a native upland seed mix.

#### **REFERENCE #6**

Client/Project Name: Walsh Environmental, Inc.

Project Location: Silver Bow Creek, Butte, Montana

Contact Person: Jon Dausvardis

303.443.3282

Project Dates: June 2002

#### Project Description:

As a subcontractor to Wals Environmental, Inc., ADC provided revegetation services for ARCO on Lower Area One (LAO) in June of 2002. ADC successfully followed Walsh plans, planted plugs provided by other growers and transplanted wetland materials salvaged on Silver Bow Creek to revegetate three treatment cells.

**REFERENCE #7** 

Client/Project Name: Shannon and Wilson Engineers

Project Location: Missouri River, Ulm, Montana

Contact Person: Steve McMullen

206.632.8020

Project Dates: June 2002

Project Description:

Working with Shannon & Wilson Engineers, ADC successfully revegetated a section of streambank on the Missouri River for Burlington Northern Railroad using willow cuttings, seed, hydro-mulch and containerized shrubs.

#### 4.1.2 Company Profile and Experience.

#### ADC Services, Inc.

#1 Ninth St. Island Drive PO Box 582 Livingston, MT 59047

Phone: 406.222.7600 Fax: 406.222.7677

Email: info@adc-services.com

Contact Person: Russell Smith, President

**ADC Services, Inc.**, incorporated in 1998, is a Livingston, Montana based company that specializes in aquatic and upland habitat enhancement, and wetland resource consulting and construction services. ADC emphasizes a multi-disciplined approach to projects. The staff includes, two fluvial geomorphologists, a fisheries biologist, two environmental scientists, a wetland ecologist, a bioengineering specialist, a horticulturist and a crew of dedicated technicians and growers. In our six years, we have completed dozens of stream and wetland restoration projects and successfully proven to our clients and permitting agencies that our team completes projects and project goals in an effective, creative and cost efficient manner.

Many of ADC's projects have involved the Design-Build-Grow process (DBG). This innovative approach offers our clients a complete product, from start to finish. We find it advantageous to project success by utilizing non-standard construction techniques with our carefully chosen heavy equipment contractors and operators. In addition, our in-house team offers a comprehensive service base for competitive rates. By shortening the lines of communication, we provide turnkey services at a much higher efficiency. However, this philosophy does not preclude ADC from working with other firms, but serves to position us well with other Agency project team members on a service-needed basis.

#### Stream & River, Lake & Wetland Specialization

ADC Services, Inc. deploys a suite of resource analysis tools that allows for the most comprehensive reporting. Using the principles of fluvial geomorphology, biological analysis, water quality sampling, wetland ecology and economic feasibility.

ADC utilizes hydrological analysis, geohydrology, and watershed studies. Coupled with analysis of riparian vegetation inventories, our design team offers innovative designs using MicroSurvey© Digital Terrain Modeling, HEC-RAS and meta-modeling capabilities for a complete, long-term solutions. In addition we have a firm knowledge of the most current bioengineered streambank and shoreline restoration techniques. Principals and staff have been trained in the Rosgen Stream Classification system and restoration principles as well as other natural channel design methodologies and in wetland delineation methodologies from the Wetlands Institute and the Army Corps – Regulatory IV- Interagency Wetlands ID and Delineation programs.

Fluvial habitat creation involves a multi-tiered approach, which does not stop at design. With all ADC stream and river channel reclamation and construction projects, comes Project Management, Quality Control, Safety Protocols, Best Management Practices (BMP's) and Monitoring Programs that identify potential on-site Design/Build opportunities. Environmental variability is the number one cause of unsuccessful projects; DBG approach allows project administrators and clients to adjust for this variability if deemed feasible and cost-effective. We are also familiar with the process of wetland mitigation crediting and have secured the necessary funding for the completion of several ADC projects.

#### **Operations**

ADC is strategically headquartered on the banks of the Yellowstone River in Livingston. Our proximity to rural Montana, modern economic centers and Agency Regional Headquarters in Helena gives us a unique opportunity to collect data, design and manage projects. In a relationship with the State of Montana our staff of professionals, technicians, support personnel and associates has the capability to communicate via Highspeed Internet, fax, phone, remote wireless voice and data.

For design and data exchanges we utilize Nikon Total Station survey equipment, CAD compatible design, 42" HP color plotter, seven PC's, and digital photographic and video equipment. In addition, we manage our client accounts, sub-contractors, supplier transactions and contracts with standardized and updated accounting practices and protocols. ADC consulting staff has continued the pursuit of professional education and knowledge through numerous training programs, conferences, professional affiliations and community outreach.

#### The ADC Native Plant Nursery

Our projects to date include comprehensive revegetation services including planting design, growing, implementation, and placement. This process includes collection, seeding, fertilizing, on-site plant growing and staging, and monitoring. Our planting survival rates and exemplary plant performance on projects are directly attributed to key ADC personnel and our quality products.

For the last three years many of ADC's projects have incorporated growing services and implementation. Our team of growers and planters can get the project done on time, and on budget. We have specific experience in obtaining necessary plant materials through seed and plant suppliers in Montana's Land Resource Regions, and by our in-house staff of collectors and identification specialists.

The nursery has been growing native upland and wetland plants for three years at our current location. We maintain approximately 4,000 ft<sup>2</sup> of climate-controlled greenhouses and over 15 acres of outside growing area. Our facilities include full-spectrum grow lights, propagation and germination chambers and a heating system for winter growing. Our field operation includes machines such as low-pressure tracked loaders, specialty willow planting equipment and hydro-seeding capabilities.

Our greenhouse operation maintains site-adapted inventory for areas within south central and southwestern Montana also provide contract-growing services for sites within the Rocky Mountain Region. Our nursery services include: harvesting native seed or collection of native stock, growing plants to requested specifications, hardening off and delivering plants to a project site. We also produce pre-vegetated coir fabric mattresses for areas with energy and erosion potential and where a more immediately restored look as required.

## **Key Personnel**

The following resumes outline the work experience, education and skills of ADC's professional staff and

associates who may be involved in revegetation projects. Please refer to section 4.1.4 and Attachment 2 for additional staff and associates who may provide assistance in future revegetation projects.

#### Tom Coleman

Principal - ADC Services, Inc.

#### **EDUCATION**

M.S., Environmental Engineering, University of Tennessee, TN, 1994 B.S., Civil Engineering, University of Tennessee, TN, 1990

## **EXPERIENCE**

Tom has been working in this field for the last 10 years and has been the co-owner of ADC Services, Inc. since 1998. He is currently a Certified Engineer in Training with the American Society of Civil Engineers. He has gained experience with biological and physical habitat inventories, collection of fish population data and native species restoration within the private sector as well as local, state and federal agencies.

Tom has led stream restoration projects from data collection through design, permitting, construction, and revegetation design and implementation. These projects involved stream creation and relocation, fluvial habitat enhancement, diagnostic studies, and pond design and construction. A broad grasp of topics including fluvial engineering, geomorphology, permitting, CAD design, MicroSurvey, and HEC-RAS modeling allows Tom to manage stream restoration projects from start to finish.

Tom's diverse experience integrates biological and earth sciences with hydrology and hydraulic engineering. He focuses his energy on innovative strategies to aquatic enhancement and restoration that emphasizes the use of natural materials to create functional and aesthetically pleasing designs.

Tom has continued his professional development by attending short courses on natural stream channel design, Rosgen stream channel classification, applied fluvial geomorphology, and river morphology and applications. These courses have reinforced Tom's knowledge of successful streambank revegetation techniques

#### AREAS OF EXPERTISE

Aquatic habitat restoration planning, design and supervision; bioengineered stream bank stabilization; fluvial geomorphology and hydraulic analysis; stream, river and wetland restoration; CAD, MicroSurvey, surveying, digital terrain models and HEC-RAS water surface profile models; permitting; and proposal, assessment and alternatives analysis report preparation.

#### **AFFILIATIONS**

- American Society of Civil Engineers (ASCE)
- Engineer in Training Certification (EIT)
- Joe Brooks Chapter Trout Unlimited (TU)

#### Russell Smith

Principal – ADC Services, Inc.

#### **EDUCATION**

B.A., Environmental Conservation, University of Colorado, CO, 1993

B.S., Minor Biology, University of Colorado, CO, 1993

A.A., Building Construction, Dean College, MA, 1988

# **EXPERIENCE**

Russell has been working in the environmental consulting industry for the last 14 years. Since 1998, he has been the co-owner and principal of ADC Services, Inc. Russell is responsible for the formation, design, execution, and supervision of the aquatic resource projects for ADC. He has served on design committees and overseen the construction of projects in Montana, Wyoming, Colorado, New Mexico, and Connecticut. As president of the company, Russell now has taken a leadership role in developing company protocols for watershed related projects.

Russell has worked extensively on the reclamation of wetlands and waterways impacted by agricultural practices as well as the reclamation of urban streams. He excels in revegetation design that maximizes restoration area and ecological enhancement. He works closely with ADC Services' clients and the Native Nursery staff to ensure that project deliverables occur on- time and within budget. He has given presentations at symposiums for city planners on the benefits to improving urban streams such as stability, water quality, aesthetics, aquatic wildlife value, and recreational opportunities.

Russell has continued his wetland training with the Army Corps of Engineers; Regulatory IV – Interagency Wetlands Identification & Delineation.

#### AREAS OF EXPERTISE

Revegetation and land reclamation planning, design and supervision; ecological restoration; biological review, sampling, analysis, report and presentation; fish habitat assessment; construction logistics, oversight, site management and review; topographic and biological survey of streams, rivers, ponds, lakes and wetlands; computer assisted design and drafting; wetland habitat analysis and delineation; aerial photo interpretation; USGS topographic map interpretation.

#### **AFFILIATIONS**

- Society of Wetland Scientists (SWS), WPIT
- Society of Ecological Restoration (SER)
- Montana Nurseryman and Landscape Association (MNLA)
- Montana Natural Resource Professionals (MNRP)

#### DeWitt Dominick

#### **EDUCATION**

M.S., Watershed Science, Utah State University, UT, 1997

B.A., Geography and Environmental Sciences, Middlebury College, VT, 1991, Graduated with Honors

#### **EXPERIENCE**

DeWitt has eight years of applied experience as a fluvial geomorphologist with an emphasis in riverine sediment dynamics, riparian plant and stream ecology, fisheries habitat assessment, stream restoration, and management of regulated rivers (1996-present). His background consists of project research and management, working on multiple spatial and temporal scales, from an entire watershed inventory and reach-based classification to at-a-station hydraulic and channel geometry assessment. DeWitt has worked on government and privately funded projects located in wildland montane and desert environments, as well as highly developed urban watersheds affected by major infrastructure and flood management issues. Dewitt's professional career as a scientist has taken him throughout the United States including Montana, Wyoming, Colorado, Oregon, Washington, Wisconsin, Missouri and Texas.

**Project Example-** Bitterroot River –MDOT Stream Mitigation Study, Ravalli County, MT.

DeWitt provided project management, field mapping, GIS database development, and evaluation of the geomorphic character and condition of over 60 miles of the main stem of the Bitterroot River. Project objectives included a cumulative effects analysis and historic evaluation of highway system impacts on channel and floodplain morphology. Six bridge structures were assessed to determine their relative effects on channel and floodplain function. Viable mitigation alternatives and strategies were developed to minimize and compensate for the transportation system impacts to the river system.

In recent years, DeWitt has provided design and construction oversight during the implementation phase of many natural river channel design projects. DeWitt's background in fluvial process and working knowledge of various plant and modern construction materials has been a tremendous asset for numerous water resource projects that require restoration of channel and floodplain ecological function and value.

#### AREAS OF EXPERTISE

Geomorphic and ecologic assessment of both form and process of river systems; hydrologic analysis; stream

ecology; riparian wetland restoration; wildland watershed management; computer modeling (GIS); permitting; field survey and mapping; concept development and alternatives analysis; historical analyses; and site stability assessment.

## **AFFILIATIONS**

- Society of Wetland Scientists (SWS)
- American Water Resources Association (AWRA)
- International Association of Geomorphologists (IAG)

#### Brandy Logan

#### **EDUCATION**

B.S., Geography and Earth Resources, Utah State University, 2000, Graduated with Honors

#### **EXPERIENCE**

Brandy has four years of professional experience in the field of fluvial geomorphology and aquatic habitat restoration (2000-present). She has been involved with construction oversight, management and report preparation for a number of ADC's river, wetland and pond restoration projects. She also has a great deal of experience with surveying, drafting software, aerial photo orthorectification and interpretation, site investigations and data mining.

Prior to working for ADC, Brandy was a field crew leader for an extensive research project conducted in Whatcom County, WA where she managed 3-7 people, scheduled fieldwork and tasks for a four-month field season. Her work included detailed surveys of stream geometry and water surface profiles, collecting temperature and discharge measurements, in addition to habitat and substrate mapping. Her office responsibilities included analysis of field data, reduction of survey data, and all steps necessary to prepare data for hydraulic modeling. She ran, tested and modified two-dimensional fish habitat models and wrote a field manual for instructing new employees. Brandy has also been involved with extended field studies of endangered fish on the Colorado, Green and San Juan Rivers.

Brandy's experience with leading field crews and implementing computer-drafted designs in the field make her a valuable member of the ADC revegetation team.

#### AREAS OF EXPERTISE

Extensive survey and mapping skills; comprehensive hydrology and geomorphology field and data analysis; research and field experience with a variety of endangered fish; site management for river, stream and spring creek restoration; Section 404 permitting; and technical report writing.

#### **AFFILIATIONS**

American Geophysical Union (AGU)

## Meghan Rae Mutch

#### **EDUCATION**

B.S., Horticulture, Montana State University, MT, 2003

#### **EXPERIENCE**

Meghan has five years of experience working in nurseries in southwest Montana (1999-present). She is responsible for coordinating field collections and identification for our revegetation projects at ADC. She also organizes and supervises the production of large-scale native wetland and non-wetland plant orders. She supervises maintenance crews for all indoor and outdoor growing. Meghan has experience in greenhouse seed and cutting propagation. She is currently in charge of updating the nursery inventory and organizing protocols for our subsequent years' plant growing.

In addition, Meghan has experience in woody plant propagation; plant physiology; horticultural science and technology; nutrient cycling, landscape management, irrigation systems and design; computer administration as well as database creation and management.

#### AREAS OF EXPERTISE

Identification of perennials, annuals, wildflowers and grasses throughout USDA zones 3,4, and 5; coordination and oversight for large-scale native plant orders; extensive expertise in seed propagation, field planting, watering, transplanting, pruning and maintenance of revegetation; identification and control of plant pests; general problem solving skills in the greenhouse and outdoor growing areas.

#### Jeannette Romig

#### **EDUCATION**

M.S., Earth Science, Montana State University, MT, 2004

B.S., General Science, University of Oregon, OR, 1997, Graduated with Honors

#### **EXPERIENCE**

Jeannette has worked in the private consulting industry for the last five years. She is responsible for wetland delineations, and report preparation, as well as construction and revegetation oversight for wetland, stream and pond projects for ADC Services, Inc.

Jeannette began her consulting career in Alaska where she collected and analyzed contaminated soil, surface water and groundwater samples for large-scale projects funded by the Corps of Engineers, Department of Defense, Environmental Protection Agency, and State of Alaska. These projects involved site assessment, remediation and long-term monitoring for both wetland and riparian habitats. She was also involved with coordinating and recording tribal community and military Restoration Advisory Board meetings in various remote locations throughout Alaska.

Since moving to Montana, Jeannette has earned her Masters of Science degree giving her a strong analytical background in groundwater hydrology and soils, as well as large database management and advanced statistical analysis. Jeannette has performed both large-scale (100+ acre) and small-scale wetland delineations (in accordance with the 1987 Corps of Engineers wetland delineation guidelines) for government agencies and private landowners in Montana. In September 2003, she attended the Wetland Training Institute course entitled, "Wetland delineation with emphasis on soils and hydrology" where she was introduced to innovative techniques for wetland delineation and impact assessment. Her experience and academic background in wetland delineation, soils and hydrology has given her a keen understanding of how to implement a successful revegetation work plan in both wetland, riparian and upland habitats.

## AREAS OF EXPERTISE

Wetland habitat analysis and delineation; site management for wetland restoration and revegetation; wetland delineation, mitigation, and alternatives analysis report preparation; stream and spring creek reclamation site management and revegetation; permitting; construction logistics and site management; soil sampling, texturing and analysis; surface water and groundwater sampling and analysis; groundwater monitoring well installation; topographic survey of streams, ponds and wetlands.

# **AFFILIATIONS**

Society of Wetland Scientists (SWS)

#### Barney Hallin - Associate

#### **EDUCATION**

B.S., Physics, Montana State University, MT, 1979, Graduated with Honors

#### **EXPERIENCE**

Barney has 26 years of professional land surveying experience (1978-present). He has been a land surveyor with Hallin & Associates since 1988 and has been registered as a Professional Land Surveyor since 1991. In

addition to his experience with residential, commercial and industrial surveying, Barney has worked on a number of aquatic-related projects with Hallin & Associates. These projects involved floodplain boundary determinations along the Yellowstone and Main Boulder River, as well as Mill Creek (Paradise Valley, MT). Other aquatic-related work includes numerous boundary projects in which ownership of the stream bed, banks and islands were determined. Barney has completed over 60 topographic mapping projects using GPS, traditional mapping skills, and 12 Aerial Photogrammetry Control networks.

## **AREAS OF EXPERTISE**

Land surveyor, party chief and instrumentation man with responsibilities involving establishing new property boundaries, section breakdown, old boundary retracement, corner search & re-establishment, horizontal and vertical control networks (using GPS-RTK and post processing and traditional methods), corner recordations, deed research, legal descriptions, topographic mapping, flood plain elevations, water flow measurements, site stake-out, roadway design, precise microwave tower alignments and microwave path studies, as well as drafting (CAD- Microstation and hand experience).

#### David Jensen - Associate

#### **EDUCATION**

B.S., Disturbed Land Rehabilitation, Minor Range Science, Montana State University, MT, 1995

#### **EXPERIENCE**

David has been involved with disturbed land rehabilitation for the last 20 years. He is the sole proprietor of Native Landscapes & Reclamation, a successful seven-year-old company specializing in large-scale residential landscapes and construction site reclamation. He coordinates and oversees projects throughout southwest and south central Montana. Dave has extensive experience in the use of erosion control mats, hydro seeding, as well as installation of plugs and containerized plant products.

David also has extensive experience in machine operation including backhoe, loaders and hydro-seeding equipment. His knowledge of reclamation planning, logistics and monitoring has helped our company for three years and has always provided sound advice and creative insight on a number of ADC's revegetation/restoration projects.

#### AREAS OF EXPERTISE

Mined land reclamation; methods of revegetating severely disturbed sites, sampling and analysis of vegetative success; soils assessment; mapping, sampling, and analyzing pre-mined and post-mined soils; mined land reclamation planning, permitting, and oversight.

#### Frank Stewart, P.E. - Associate

#### **EDUCATION**

M.S., Civil Engineering, Montana State University, 1988 B.S., Electrical Engineering, University of Alabama, 1974

#### **EXPERIENCE**

Frank Stewart has been working as an engineer for the last 29 years, is a registered Professional Engineer, and has owned Stewart Engineering since 1997. He has recently completed projects involving design and oversight of ponds, dams, pipelines, and open channels; aquifer testing and modeling; and mathematical modeling of biofouled pipelines. Frank has written a number of successful federal grant applications for R & D projects and served as the design engineer and/or project manager for these projects. He is experienced with investigation and remediation of leaking petroleum tanks and pipelines. Frank is a registered Septic Site Evaluator in Gallatin County, Mt. These investigations include groundwater and surface water sampling for nitrate, hydraulic conductivity calculations, groundwater gradient determination, calculation of nitrate and phosphorus plumes, contour mapping, data tabulation, design of septic systems, and reporting. This work has provided a strong background in practical field methods of data collection, as well as experience in computer mapping and reporting to governmental agencies.

#### AREAS OF EXPERTISE

Design of pressure and gravity-flow pipeline systems; aquifer testing and analysis; design of groundwater pumping systems; design of pond and dams; design and modification of stream channels; design of fire suppression systems; development of budgets and timelines; completion of structural applications in accordance with federal requirements; development of installation specifications; budget oversight and management; production of as-built manuals; code generation for imbedded micro controllers; user-interface design and code generation for PC-based interactive applications; CAD products; statistical analysis and graphical presentation of data.

#### 4.1.3 Method of Providing Services & Quality Assurance

Project Example: Jack Creek Ranch (Please see Sub-section 4.1.1 for complete project description and Attachment 1 for design report and work plan.) A design, build, grow approach was used for the project. ADC-Services collected data, designed the project defining preferred construction alternatives, evaluated site conditions during construction to determine the preferred alternative and constructed the project successfully with appropriate adjustment made in the field based on variable site conditions. In addition to this design report, the work plan included detailed construction sequencing plans for the construction subcontractor, Devers Excavation & Aquatics.

<u>Definitive Statement</u> – This concept described the project to be undertaken. At the Jack Creek Ranch (JCR), a series of initial site visits with the landowner and general background research was accomplished to determine general parameters and opportunities for wetland development. Time frame: 1 month

<u>Design and Permit</u> – Create a design/permit budget/plan and Agreement for pre-construction activity. This preliminary budget allowed for further exploration of feasibility and requirements. Time Frame: 8 months

<u>Background</u> - Acquired all necessary data including existing topographic surveys, setbacks, elevations, hydrology, soil profiles, biology, aerial photos, maps, etc.

Site Inspection - Included observations, measurements, photographs and interviews.

Project Program - Interviewed the landowner. Prioritized site considerations and spatial needs.

<u>Descriptive Report and Design Documentation</u> - Included all data above as well as a statement which spoke to the viability of the project in relation to zoning, permits, budget, etc.

Outline Specification - Described the quality of construction materials, equipment and revegetation.

<u>Permit Application and Acquisition</u> – Submitted all necessary permits as required, attended public hearings, conducted agency communication, documented further requirements as was necessary.

<u>Construction Documents</u> – Prepared documents (drawings and specifications), sufficient to detail the project.

<u>Construction Budget and Contract Documents</u> - Prepared construction budget and contract for the construction phase of project.

Construction and Revegetation Phase - Time Frame: 1 year

<u>Site Management</u> - Insured that construction proceeded in accordance with design, construction, and contract documents.

<u>Site Inspection Report</u> - Submitted a bi-weekly report and/or site visit to/with the Owners Agent and the Contractor for record or action.

<u>Review</u> – Examined additional drawings and diagrams submitted by Sub-Contractors and project management.

<u>Construction Conferences</u> – Attended conferences as requested by the Owner/Agent or Contractor.

<u>Sub-Contractor Requests for Payment</u> – Reviewed, submitted and forwarded requests for payment to Owner/Agent as necessary.

<u>Attend and Testify</u> – Followed up, as necessary, all proceedings initiated in relation to the project such agency reviews and client site visits.

Monitoring and Maintenance – Maintained revegetation and site monitoring. (Current)

# 4.1.4 Staff Qualifications

Aquatic Design & Construction, Inc. Personnel				
Name	Years of Experience	Special Training & Experience	Registrations & Affiliations	
<u>Principals</u>				
Tom Coleman, EIT MS, Environmental Engineering BS, Civil Engineering	Professional: 10 years Category Related: 10 years	Natural Stream Channel Design, Short Course by Inter Fluve, Inc., Rosgen Level I, II, & III, Stream Classification, Stream and Riparian Habitat Restoration and Revegetation Design/Implementation	ASCE, EIT, TU	
Russell Smith, WPIT BA, Environmental Conservation BS, Minor Biology AA, Building Construction	Professional: 14 years Category Related: 14 years	Revegetation & Land Reclamation, Wetland Analysis & Delineation, Fish Habitat Assessment, Permitting, USCOE Regulatory IV-Interagency Wetlands Identification & Delineations	SWS, SER, MNLA, MNRP	
Professional S	<u>taff</u>	Level 2a,	Chain of Command	
DeWitt Dominick MS, Watershed Science BA, Geography & Environmental Sciences	Professional: 8 years Category Related: 8 years	Fluvial Geomorphology, Stream Ecology, Riparian Wetland Restoration, Permitting, Surveying, GIS, Surficial Mapping/Interpretation Natural Stream Channel Design	AWRA, IAG, SWS	
Brandy Logan BS, Geography & Earth Resources	Professional: 4 years Category Related: 4 years	Fluvial Geomorphology, Riparian Restoration, Surveying & Mapping, Drafting, Permitting	AGU	
Dave Mandrella BS, Fisheries / Aquatic Ecology	Professional: 26 years Category Related: 14 years	NFS Fisheries Biologist, Fluvial Geomorphology, TMDL, NEPA, Environmental Assessments, GIS, Statistical Analysis, Permitting, Watershed Restoration, NEPA Training, GIS/ARC VIEW, Rosgen Stream Channel Classification	AFS, TU	
Jeannette Romig MS, Earth Science BS, General Science	Professional: 4 years Category Related: 3 years	Wetland/Stream Restoration, Wetland Delineation With Emphasis On Soils & Hydrology, Permitting, Adv. Statistics	sws	

Meghan Rae Mutch BS, Horticulture	Professional: 5 years Category Related: 5 years	Greenhouse/Nursery Management, Native Upland, Wetland & Riparian Plant Collection, Propagation, Transplanting & Maintenance	Chain of Command
Professional A	<u>ISSOCIATES</u>	Level 20,	Chain of Command
Doctoral Candidate, Civil Engineering MS, Civil Engineering BS, Geological Engineering	Professional: 12 years Category Related: 12 years	Hydrology, Hydraulics, Fish Passage, Fluvial Geomorphology, Haz. Waste, CFD, HEC-RAS, 3D&1D Flow Modeling, Permitting, NEPA CFX-5, Applied River Geomorphology (Rosgen), 40hr HAZWOPER, Contractor Quality Control	EIT, TU
Barney Hallin BS, Physics	Professional: 26 years Category Related: 26 years	Registered Professional Land Surveyor, Drafting	
David Jensen BS, Disturbed Land Rehabilitation	Professional: 20 years Category Related: 20 years	Disturbed Land Rehabilitation, Range Science, Native Plant Specialist	
Tom Sharp, EIT PhD, Civil Engineering MS, Environmental Engineering BS, Biological Sciences BS, Biological Sciences	Professional: 15 years Category Related: 9 years	Constructed Wetlands, Chemical/Biological Wastewater & Sediment Treatment, Geohydrology, Hydrology, Limnology, Aqueous Chemistry, TMDL, EIS, RI, EA, NEPA Watershed Modeling Systems, TMDL	EIT, SMME
Frank Stewart, P.E.	Professional: 29 years Category Related: 29 years	Hydrologic and Hydraulic Engineering, Hazardous Waste Remediation, Project Management, Code Generation, CAD, Statistical Analysis	Registered Professional Engineer, Registered Septic Site Evaluator

## 4.1.3 Staff Qualifications - Continued

See section 4.1.2 for the following resumes: Tom Coleman, Russell Smith, DeWitt Dominick, Brandy Logan, Meghan Mutch, Jeannette Romig, Barny Hallin, David Jensen and Frank Stewart. Resumes for the remaining individuals listed in the staff qualification chart are below.

## Dave Mandrella

#### **EDUCATION**

B.S., Fisheries / Aquatic Ecology, University of Michigan, MI, 1975.

#### **EXPERIENCE**

Dave worked for the U.S. National Forest Service as fisheries biologist form 1990-2004 and has 26 years of field experience (1978-present). His 14 years of experience with the NFS has provided him with a strong interdisciplinary background in, lake and stream management along with fish population/habitat relationships, habitat restoration, stream and riparian ecology, native species restoration, fluvial geomorphology, forestry, soil science, and geology. He has developed and implemented plans related to the protection and restoration of lake, riverine, riparian and wetland ecosystems by evaluating the impacts of Forest and non-Forest Service activities on fish and wildlife populations and habitat. Habitat restoration and enhancement projects

that Dave has implemented include restoring wetland hydrology; rehabilitating eroding banks and in-stream aquatic habitat through bioengineering techniques; reestablishing fish passage; and planting native trees and shrubs. Dave is familiar with Section 303 (d) The Total Maximum Daily Load program and has extensive experience with the NEPA process, permit preparation for fulfilling section 404 requirements. He has prepared watershed analyses reports, habitat restoration proposals, lake and stream management recommendations, Yellowstone cutthroat trout sub-basin plans, range management revisions, environmental assessments, biological evaluations, KV plans and project monitoring reports. He has also effectively promoted partnerships and cooperative agreements with federal, State, and local agencies as well as with landowners to preserve and restore riverine, riparian and wetland habitat on private and public lands.

Dave has continued his professional development through a number of educational courses including: Applied Fluvial Geomorphology (David Rosgen), Natural Resource Inventory System, Hydrology and Watershed Management, GIS/ ARC VIEW, Watershed Restoration: Design and Implementation, Aquatic Ecological Classification, Practical Approaches to Riparian Restoration, NEPA Training, Stream Restoration and Natural Channel Design Workshop, Basin-wide Stream Habitat Surveys and Applications, and Wildlife Habitat Management Shortcourse.

#### **AREAS OF EXPERTISE**

Plan, coordinate and execute field inventories for aquatic TES species, stream and lake habitat assessments and fish population estimates at the watershed and sub-basin scales; Rosgen stream classification; planning and implementation of water quality, aquatic habitat, and geomorphic monitoring programs; development and implementation of stream restoration, bank stabilization and protection structures and techniques; installation of spawning channels, non-native fish barriers, and fish passage structures; groundwater and surface water sampling and chemical analysis; advanced statistical analysis; computer modeling (GIS); Section 303(d) and Section 404 permitting; TMDL; Environmental Assessments and Environmental Impact Statements; NEPA; and various technical report preparation.

#### **AFFILIATIONS**

- American Fisheries Society (AFS)
- Trout Unlimited (TU)

Matt Blank - Associate

#### **EDUCATION**

Doctoral Candidate, Civil Engineering, Montana State University, MT, Anticipated Graduation 2005

M.S., Civil Engineering, Montana State University, MT, 2002

B.S., Geological Engineering, University of Wisconsin-Madison, WI, 1994, Graduated with Honors

#### **EXPERIENCE**

Matt has worked in the civil and environmental engineering field since 1992. He is currently an Engineer in Training and is leading a research project funded by the Montana Department of Transportation that is investigating how culverts may fragment fish distributions across a watershed of the Upper Yellowstone River. He is analyzing the predictive capacity of 3-D computation fluid dynamics (CFD) modeling and 3-D flow structure in natural stream reaches and culverts; in-stream field evaluation of fish movement timing; and instructor as well as the "Applied Analysis" course that focuses on Excel, MathCAD and Visual Basics programming for solution of engineering problems.

Matt has recently worked as a sub-consultant for several local companies. Most notable was his involvement with the development of a water surface profile and sediment transport model of the Milltown Dam using HEC-6 for Land and Water Consulting, Inc. He analyzed different dam breach scenarios for estimation of scour depths and sediment transport volume; and estimation of downstream total suspended solids (TSS).

Prior to his return to school, Matt worked as a project engineer in Alaska from 1995-2000, and was an environmental technician in Wisconsin from 1992-1995. He served as the field manager, project manager and

project engineer for a number of projects involving ecological assessments, groundwater and surface water flow studies, waste inventories at landfills and drum disposal sites, drum and waste removals, waste characterizations, pipeline abandonment and assessment, above-ground storage tank (AST) demolition, abandoned hospital site characterization, mercury-containing device removals, contamination assessments, intrinsic remediation studies of soil and groundwater, extensive groundwater monitoring studies, landfill evaluations, contaminated soils excavations, wetland delineation and re-vegetation, human food chain evaluation, contaminated fate and transport modeling, and biota evaluation. Matt has designed and implemented bioventing systems, soil vapor extraction (SVE) and air sparging (AS) systems. He has prepared and implemented RA/RI workplans, field sampling plans, quality assurance project plans, contractor quality control plans, waste management plans, environmental protection plans; and final reports.

Matt has taken the following specialized training courses: CFX-5 Introductory Course, Applied River Geomorphology (Dave Rosgen-Instructor), Designing and Implementing Habitat Modifications for Salmon and Trout; Contractor Quality Control; 40 Hour HAZWOPER.

#### AREAS OF EXPERTISE

Hydrology; hydraulics; fish passage; fluvial geomorphology; geology; contaminated site characterization and remediation (groundwater, surface water and sediments); 3-D and 1-D flow structure modeling; CFD, HEC-RAS, MathCAD, VBA, statistical analysis, NEPA, and permitting.

#### Tom Sharp, Ph.D. - Associate

#### **EDUCATION**

Ph.D., Civil Engineering, Montana State University, MT, 1999

M.S., Environmental Engineering, Montana Tech of the University of Montana, MT 1996

M.S., Biological Sciences, Montana State University, MT, 1993

B.S., Biological Sciences, Montana State University, MT, 1988

#### **EXPERIENCE**

Tom Sharp has worked in the civil and environmental engineering field in Montana since 1995 and is now the president of his own company, Sharp Corp., which has been in business since 2002. Prior to 1995 he worked for seven years as a biologist in Montana, Washington and North Carolina. In April 2004, Tom took the Professional Engineer Exam and will get the test results in June 2004.

Tom has designed and prepared feasibility studies, treatability studies, and engineering cost analysis reports for a number of large-scale projects requiring the use of constructed wetlands and/or lagoons for treating waters and sediments impacted by historic mining. Other work related to these projects involved modeling the effect of biogeochemical carbon, nitrogen and phosphorus cycling on pH and CO<sub>2</sub> equilibria in the constructed wetlands and treatment lagoons for removing metals from surface and groundwater. He has designed and prepared environmental impact statements, remedial investigation and site characterization reports, including fate and transport reports for several mining operations in Montana. Tom's limnology, hydrology and aquatic ecology background has enabled him to develop water quality monitoring programs; characterize water chemistry, physical limnology and sediment samples; prepare QA/QC plans and surface water sampling plans for EPA Region10; evaluate flood frequencies using USGS protocols; and prepare stage hydrographs using hydraulic modeling software.

Tom has continued his professional development by attending the following short courses and workshops: Watershed Modeling System (WMS) Software Workshop (ASCE); Watershed Modeling Workshop, Water Environment Federation Watershed Conference; TMDLs – Opportunity or Controversy for the San Francisco Bay Area Seminar; Arc View GIS for the Environmental Professional.

#### AREAS OF EXPERTISE

Constructed wetlands; groundwater remediation; site characterization; chemical and biological wastewater treatment; contaminated sediments; geohydrology; hydrology; limnology; aqueous geochemistry; microbial ecology; TMDL; NEPA; Arc View, GIS, Flowmaster, PHREEQC, and statistical software.

## **AFFILIATIONS**

• Society for Mining, Metallurgy, and Exploration

# 4.2 OFFEROR INFORMATIONAL RQUIREMENTS - SPECIFIC SERVICE CATEGORIES

<u>4.2.1 Revegetation Services.</u> ADC Services, Inc. and our associates meet the staffing requirements for this services category. Over 50% of the staff identified for this category have a Natural Science degree. Below is a completed cost sheet for our nursery services.